```
Db        601 CTTCCAGGAGCAGGAGCAGGGGCAGGGGCAGGGGCAGGGAGAGCCCTGCATTTCCTCTAC 660

Qy       1914 GCCCAGGTTCCGGAAGGTGGTGAGACAGGCCAGCGTGCATGACAGTGGAGAGGAGGGCGA 1973
              ||||||||||||||||||||||||||||||||||||||||||||||||||| |||| ||
Db        661 GCCCAGGTTCCGGAAGGTGGTGAGACAGGCCAGCGTGCATGACAGTGGAAAGGAAGGGCG 720

Qy       1974 GGCCTGA 1980
              |||||||
Db        721 AGCCTGA 727


RESULT 8
BE531347
LOCUS       BE531347                750 bp    mRNA    linear   EST 09-AUG-2000
DEFINITION  601278540F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610616 5',
            mRNA sequence.
ACCESSION   BE531347
VERSION     BE531347.1  GI:9759906
KEYWORDS    EST.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 750)
  AUTHORS   NIH-MGC http://mgc.nci.nih.gov/.
  TITLE     National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL   Unpublished
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: ATCC
             cDNA Library Preparation: Ling Hong/Rubin Laboratory
             cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
             DNA Sequencing by: Incyte Genomics, Inc.
             Clone distribution: MGC clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            http://image.llnl.gov
            Plate: LLCM266  row: p  column: 09
            High quality sequence start: 3
            High quality sequence stop: 750.
FEATURES             Location/Qualifiers
     source          1. .750
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:3610616"
                     /tissue_type="adenocarcinoma"
                     /lab_host="DH10B (phage-resistant)"
                     /clone_lib="NIH_MGC_39"
                     /note="Organ: pancreas; Vector: pOTB7; Site_1: XhoI;
                     Site_2: EcoRI; cDNA made by oligo-dT priming.
                     Directionally cloned into EcoRI/XhoI sites using the
                     following 5' adaptor: GGCACGAG(G).  Library constructed
                     by Ling Hong in the laboratory of Gerald M. Rubin
                     (University of California,  Berkeley) using ZAP-cDNA
                     synthesis kit (Stratagene) and Superscript II RT (Life
                     Technologies)."
BASE COUNT      158 a    240 c    232 g    120 t
ORIGIN

  Query Match             35.9%;  Score 711;  DB 10;  Length 750;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-128;
  Matches  711;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1100 ACTTCTACCCTGAGCGCTTCACCTACCACAATGTGCGCCTCTGGGATGAGGAGTCGGCCC 1159
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         40 ACTTCTACCCTGAGCGCTTCACCTACCACAATGTGCGCCTCTGGGATGAGGAGTCGGCCC 99

Qy       1160 AGCTGCTGCCGCACTGGAAGGAGACGCACCGCTTCATTGAGGCTGCAAGAGCACAGGGCA 1219
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        100 AGCTGCTGCCGCACTGGAAGGAGACGCACCGCTTCATTGAGGCTGCAAGAGCACAGGGCA 159

Qy       1220 CCCACGTGCTGGTCCACTGCAAGATGGGCGTCAGCCGCTCAGCGGCCACAGTGCTGGCCT 1279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        160 CCCACGTGCTGGTCCACTGCAAGATGGGCGTCAGCCGCTCAGCGGCCACAGTGCTGGCCT 219

Qy       1280 ATGCCATGAAGCAGTACGAATGCAGCCTGGAGCAGGCCCTGCGCCACGTGCAGGAGCTCC 1339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 ATGCCATGAAGCAGTACGAATGCAGCCTGGAGCAGGCCCTGCGCCACGTGCAGGAGCTCC 279

Qy       1340 GGCCCATCGCCCGCCCCAACCCTGGCTTCCTGCGCCAGCTGCAGATCTACCAGGGCATCC 1399
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 GGCCCATCGCCCGCCCCAACCCTGGCTTCCTGCGCCAGCTGCAGATCTACCAGGGCATCC 339

Qy       1400 TGACGGCCAGCCGCCAGAGCCATGTCTGGGAGCAGAAAGTGGGTGGGGTCTCCCCAGAGG 1459
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 TGACGGCCAGCCGCCAGAGCCATGTCTGGGAGCAGAAAGTGGGTGGGGTCTCCCCAGAGG 399

Qy       1460 AGCACCCAGCCCCTGAAGTCTCTACACCATTCCCACCTCTTCCGCCAGAACCTGAGGGTG 1519
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 AGCACCCAGCCCCTGAAGTCTCTACACCATTCCCACCTCTTCCGCCAGAACCTGAGGGTG 459

Qy       1520 GTGGGGAGGAGAAGGTTGTAGGCATGGAAGAGAGCCAGGCAGCCCCGAAAGAAGAGCCTG 1579
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        460 GTGGGGAGGAGAAGGTTGTAGGCATGGAAGAGAGCCAGGCAGCCCCGAAAGAAGAGCCTG 519

Qy       1580 GGCCACGGCCACGTATAAACCTCCGAGGGGTCATGAGGTCCATCAGTCTTCTGGAGCCCT 1639
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        520 GGCCACGGCCACGTATAAACCTCCGAGGGGTCATGAGGTCCATCAGTCTTCTGGAGCCCT 579

Qy       1640 CCTTGGAGCTGGAGAGCACCTCAGAGACCAGTGACATGCCAGAGGTCTTCTCTTCCCACG 1699
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        580 CCTTGGAGCTGGAGAGCACCTCAGAGACCAGTGACATGCCAGAGGTCTTCTCTTCCCACG 639

Qy       1700 AGTCTTCACATGAAGAGCCTCTGCAGCCCTTCCCACAGCTTGCAAGGACCAAGGGAGGCC 1759
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        640 AGTCTTCACATGAAGAGCCTCTGCAGCCCTTCCCACAGCTTGCAAGGACCAAGGGAGGCC 699

Qy       1760 AGCAGGTGGACAGGGGGCCTCAGCCTGCCCTGAAGTCCCGCCAGTCAGTGG 1810
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        700 AGCAGGTGGACAGGGGGCCTCAGCCTGCCCTGAAGTCCCGCCAGTCAGTGG 750


RESULT 9
BU537952
LOCUS       BU537952                947 bp    mRNA    linear   EST 13-SEP-2002
DEFINITION  AGENCOURT_10186579 NIH_MGC_107 Homo sapiens cDNA clone
            IMAGE:6568457 5', mRNA sequence.
ACCESSION   BU537952
VERSION     BU537952.1  GI:22848393
KEYWORDS    EST.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 947)
  AUTHORS   NIH-MGC http://mgc.nci.nih.gov/.
  TITLE     National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL   Unpublished
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: ATCC
             cDNA Library Preparation: Rubin Laboratory
             cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
             DNA Sequencing by: Agencourt Bioscience Corporation
             Clone distribution: MGC clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            http://image.llnl.gov
            Plate: LLCM2754  row: c  column: 17
            High quality sequence stop: 614.
FEATURES             Location/Qualifiers
     source          1. .947
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:6568457"
                     /tissue_type="adenocarcinoma, cell line"
```

DE Novel human coding sequence SEQ ID NO: 243.
XX
KW Human; antianaemic; vulnerary; antiinflammatory; immunomodulator;
KW antiinfertility; cerebroprotective; cytostatic; rheumatic; gene therapy;
KW neuroprotective; antiparkinsonian; protein therapy; EST;
KW expressed sequence tag; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200222660-A2.
XX
PD 21-MAR-2002.
XX
PF 10-SEP-2001; 2001WO-US26015.
XX
PR 11-SEP-2000; 2000US-0659671.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Zhou P, Asundi V, Zhang J, Zhao QA, Ren F;
PI Xue AJ, Yang Y, Wehrman T, Drmanac RT;
XX
DR WPI; 2002-292408/33.
DR P-PSDB; ABB97419.
XX
PT An isolated polynucleotide for treating diseases associated with its
PT encoded polypeptide such as cancer and multiple sclerosis -
XX
PS Claim 1; SEQ ID NO 243; 509pp; English.
XX
CC The present invention provides the protein and coding sequences of 444
CC novel human proteins. These were isolated from expressed sequences tags
CC (ESTs). They can be used to stimulate cell growth, to regulate
CC haematopoiesis e.g. to treat aplastic anaemia, to help tissue regrowth
CC e.g. in burn treatment, to regulate the immune system e.g. to treat
CC multiple sclerosis, to regulate activin or inhibin e.g. to treat
CC infertility, to regulate haemostasis or thrombolysis e.g. to treat
CC stroke and cancer, to screen for drugs, to treat inflammatory conditions
CC e.g. rheumatoid arthritis, and to treat nervous system disorders e.g.
CC Parkinson's disease. The present sequence is a coding sequence of the
CC invention.
XX
SQ Sequence 2061 BP; 415 A; 672 C; 605 G; 369 T; 0 other;

ABN59832 (QCC #)

Query Match 43.0%; Score 851; DB 24; Length 2061;
Best Local Similarity 100.0%; Pred. No. 1.4e-170;
Matches 851; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 ATGGCCCTGGTCACAGTGAGCCGTTCGCCCCCGGGCAGCGGCGCCTCCACGCCCGTGGGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        147 ATGGCCCTGGTCACAGTGAGCCGTTCGCCCCCGGGCAGCGGCGCCTCCACGCCCGTGGGG 206

Qy         61 CCCTGGGACCAGGCGGTCCAGCGAAGGAGTCGACTCCAGCGAAGGCAGAGCTTTGCGGTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        207 CCCTGGGACCAGGCGGTCCAGCGAAGGAGTCGACTCCAGCGAAGGCAGAGCTTTGCGGTG 266

Qy        121 CTCCGTGGGGCTGTCCTGGGACTGCAGGATGGAGGGGACAATGATGATGCAGCAGAGGCC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        267 CTCCGTGGGGCTGTCCTGGGACTGCAGGATGGAGGGGACAATGATGATGCAGCAGAGGCC 326

Qy        181 AGTTCTGAGCCAACAGAGAAGGCCCCGAGTGAGGAGGAGCTCCACGGGGACCAGACAGAC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        327 AGTTCTGAGCCAACAGAGAAGGCCCCGAGTGAGGAGGAGCTCCACGGGGACCAGACAGAC 386

Qy        241 TTCGGGCAAGGATCCCAGAGTCCCCAGAAGCAGGAGGAGCAGAGGCAGCACCTGCACCTC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        387 TTCGGGCAAGGATCCCAGAGTCCCCAGAAGCAGGAGGAGCAGAGGCAGCACCTGCACCTC 446

Qy        301 ATGGTACAGCTGCTGAGGCCGCAGGATGACATCCGCCTGGCAGCCCAGCTGGAGGCACCC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        447 ATGGTACAGCTGCTGAGGCCGCAGGATGACATCCGCCTGGCAGCCCAGCTGGAGGCACCC 506

Qy        361 CGGCCTCCCCGGCTCCGCTACCTGCTGGTAGTTTCTACACGAGAAGGAGAAGGTCTGAGC 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        507 CGGCCTCCCCGGCTCCGCTACCTGCTGGTAGTTTCTACACGAGAAGGAGAAGGTCTGAGC 566

Qy        421 CAGGATGAGACGGTCCTCCTGGGCGTGGATTTCCCTGACAGCAGCTCCCCCAGCTGCACC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        567 CAGGATGAGACGGTCCTCCTGGGCGTGGATTTCCCTGACAGCAGCTCCCCCAGCTGCACC 626

Qy        481 CTGGGCCTGGTCTTGCCCCTCTGGAGTGACACCCAGGTGTACTTAGATGGAGACGGGGGC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        627 CTGGGCCTGGTCTTGCCCCTCTGGAGTGACACCCAGGTGTACTTAGATGGAGACGGGGGC 686

Qy        541 TTCAGCGTGACGTCTGGTGGGCAAAGCCGGATCTTCAAGCCCATCTCCATCCAGACCATG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        687 TTCAGCGTGACGTCTGGTGGGCAAAGCCGGATCTTCAAGCCCATCTCCATCCAGACCATG 746

Qy        601 TGGGCCACACTCCAGGTATTGCACCAAGCATGTGAGGCAGCTCTAGGCAGCGGCCTTGTA 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        747 TGGGCCACACTCCAGGTATTGCACCAAGCATGTGAGGCAGCTCTAGGCAGCGGCCTTGTA 806

Qy        661 CCGGGTGGCAGTGCCCTCACCTGGGCCAGCCACTACCAGGAGAGACTGAACTCCGAACAG 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        807 CCGGGTGGCAGTGCCCTCACCTGGGCCAGCCACTACCAGGAGAGACTGAACTCCGAACAG 866

Qy        721 AGCTGCCTCAATGAGTGGACGGCTATGGCCGACCTGGAGTCTCTGCGGCCTCCCAGCGCC 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        867 AGCTGCCTCAATGAGTGGACGGCTATGGCCGACCTGGAGTCTCTGCGGCCTCCCAGCGCC 926

Qy        781 GAGCCTGGCGGGTCCTCAGAACAGGAGCAGATGGAGCAGGCGATCCGTGCTGAGCTGTGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        927 GAGCCTGGCGGGTCCTCAGAACAGGAGCAGATGGAGCAGGCGATCCGTGCTGAGCTGTGG 986

Qy        841 AAAGTGTTGGA 851
              ||||||||||||
Db        987 AAAGTGTTGGA 997
```

RESULT 11
AAH14722
ID AAH14722 standard; cDNA; 1755 BP.
XX
AC AAH14722;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA sequence SEQ ID NO:12452.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-0116126.
XX
PR 29-JUL-1999; 99JP-0216036.
PR 27-AUG-1999; 99JP-0300253.
PR 11-JAN-2000; 2000JP-0118776.
PR 02-MAY-2000; 2000JP-0183767.
PR 09-JUN-2000; 2000JP-0241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602
PT full-length cDNAs defined in the specification, and for the detection
PT and/or diagnosis of the abnormality of the proteins encoded by the
PT full-length cDNAs -

XX
PS Claim 8; SEQ ID 12452; 2537pp + CD ROM; English.
XX
CC The present invention describes primer sets for synthesising 5602
CC full-length cDNAs defined in the specification. Where a primer set
CC comprises: (a) an oligo-dT primer and an oligonucleotide complementary
CC to the complementary strand of a polynucleotide which comprises one of
CC the 5602 nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in
CC the specification. The primer sets can be used in antisense therapy and
CC in gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to
CC AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632
CC represent oligonucleotides, all of which are used in the exemplification
CC of the present invention.
XX
SQ Sequence 1755 BP; 350 A; 577 C; 505 G; 323 T; 0 other;

Query Match 35.1%; Score 694; DB 22; Length 1755;
Best Local Similarity 89.1%; Pred. No. 2.2e-137;
Matches 802; Conservative 0; Mismatches 0; Indels 98; Gaps 1;

```
Qy      1081 ATGGCCCGGGAGATTGACAACTTCTACCCTGAGCGCTTCACCTACCACAATGTGCGCCTC 1140
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       322 ATGGCCCGGGAGATTGACAACTTCTACCCTGAGCGCTTCACCTACCACAATGTGCGCCTC 381

Qy      1141 TGGGATGAGGAGTCGGCCCAGCTGCTGCCGCACTGGAAGGAGACGCACCGCTTCATTGAG 1200
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       382 TGGGATGAGGAGTCGGCCCAGCTGCTGCCGCACTGGAAGGAGACGCACCGCTTCATTGAG 441

Qy      1201 GCTGCAAGAGCACAGGGCACCGACGTGCTGGTCCACTGCAAGATGGGCGTCAGCCGCTCA 1260
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       442 GCTGCAAGAGCACAGGGCACCCACGTGCTGGTCCACTGCAAGATGGGCGTCAGCCGCTCA 501

Qy      1261 GCGGCCACAGTGCTGGCCTATGCCATGAAGCAGTACGAATGCAGCCTGGAGCAGGCCCTG 1320
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       502 GCGGCCACAGTGCTGGCCTATGCCATGAAGCAGTACGAATGCAGCCTGGAGCAGGCCCTG 561

Qy      1321 CGCCACGTGCAGGAGCTCCGGCCCATCGCCCGCCCCAACCCTGGCTTCCTGCGCCAGCTG 1380
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       562 CGCCACGTGCAGGAGCTCCGGCCCATCGCCCGCCCCAACCCTGGCTTCCTGCGCCAGCTG 621

Qy      1381 CAGATCTACCAGGGCATCCTGACGGCCAGCCGCCAGAGCCATGTCTGGGAGCAGAAAGTG 1440
             |||||||||||||||||||||||
Db       622 CAGATCTACCAGGGCATCCTGACG---------------------------------- 645

Qy      1441 GGTGGGGTCTCCCCAGAGGAGCACCCAGCCCCTGAAGTCTCTACACCATTCCCACCTCTT 1500
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       646 ---------------------------------------------------------- 645

Qy      1501 CCGCCAGAACCTGAGGGTGGTGGGGAGGAGAAGGTTGTAGGCATGGAAGAGAGCCAGGCA 1560
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       646 --GCCAGAACCTGAGGGTGGTGGGGAGGAGAAGGTTGTAGGCATGGAAGAGAGCCAGGCA 703

Qy      1561 GCCCCGAAAGAAGAGCCTGGGCCACGGCCACGTATAAACCTCCGAGGGGTCATGAGGTCC 1620
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       704 GCCCCGAAAGAAGAGCCTGGGCCACGGCCACGTATAAACCTCCGAGGGGTCATGAGGTCC 763

Qy      1621 ATCAGTCTTCTGGAGCCCTCCTTGGAGCTGGAGAGCACCTCAGAGACCAGTGACATGCCA 1680
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       764 ATCAGTCTTCTGGAGCCCTCCTTGGAGCTGGAGAGCACCTCAGAGACCAGTGACATGCCA 823

Qy      1681 GAGGTCTTCTCTTCCCACGAGTCTTCACATGAAGAGCCTCTGCAGCCCTTCCCACAGCTT 1740
```

```
Db       824 GAGGTCTTCTCTTCCCACGAGTCTTCACATGAAGAGCCTCTGCAGCCCTTCCCACAGCTT 883

Qy      1741 GCAAGGACCAAGGGAGGCCAGCAGGTGGACAGGGGGCCTCAGCCTGCCCTGAAGTCCCGC 1800
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       884 GCAAGGACCAAGGGAGGCCAGCAGGTGGACAGGGGGCCTCAGCCTGCCCTGAAGTCCCGC 943

Qy      1801 CAGTCAGTGGTTACCCTCCAGGGCAGTGCCGTGGTGGCCAACCGGACCCAGGCCTTCCAG 1860
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       944 CAGTCAGTGGTTACCCTCCAGGGCAGTGCCGTGGTGGCCAACCGGACCCAGGCCTTCCAG 1003

Qy      1861 GAGCAGGAGCAGGGGCAGGGGCAGGGGCAGGGAGAGCCCTGCATTTCCTCTACGCCCAGG 1920
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1004 GAGCAGGAGCAGGGGCAGGGGCAGGGGCAGGGAGAGCGCTGCATTTCCTCTACGCCCAGG 1063

Qy      1921 TTCCGGAAGGTGGTGAGACAGGCCAGCGTGCATGACAGTGGAGAGGAGGGCGAGGCCTGA 1980
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1064 TTCCGGAAGGTGGTGAGACAGGCCAGCGTGCATGACAGTGGAGAGGAGGGCGAGGCCTGA 1123
```

RESULT 12
ABL40801
ID ABL40801 standard; DNA; 1755 BP.
XX
AC ABL40801;
XX
DT 03-JUL-2002 (first entry)
XX
DE Human MAP kinase phosphatase-like enzyme DNA fragment.
XX
KW Mitogen activated protein; MAP; MAP kinase phosphatase-like enzyme;
KW antiasthmatic; antidiabetic; anorectic; cytostatic; cardiant; human;
KW antiparkinsonian; cerebroprotective; neuroprotective; nootropic; gene;
KW neuroleptic; anticonvulsant; anti-HIV; antiarrhythmic; hypotensive;
KW antiallergic; dermatological; vulnerary; gene therapy; ds.
XX
OS Homo sapiens.
XX
PN WO200220732-A2.
XX
PD 14-MAR-2002.
XX
PF 27-AUG-2001; 2001WO-EP09848.
XX
PR 07-SEP-2000; 2000US-230709P.
XX
PA (FARB ) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-339802/37.
XX
PT New human mitogen activated protein kinase phosphatase-like enzyme
PT polypeptide, regulators of which are useful for preventing, treating
PT allergies including asthma, diabetes, obesity, cancer and
PT cardiovascular diseases -
XX
PS Disclosure; Fig 4; 134pp; English.
XX
CC The invention relates to a purified human mitogen activated protein (MAP)
CC kinase phosphatase-like enzyme polypeptide. The enzyme can be expressed
CC by standard recombinant methodology. The MAP kinase phosphatase-like
CC enzyme and encoding polynucleotides are useful for screening for
CC modulators which are used for treating a MAP kinase phosphatase-like
CC enzyme dysfunction related disease, such as asthma, a central nervous
CC system disorder, diabetes, obesity, chronic obstructive pulmonary
CC disease, cancer or a cardiovascular disease. The enzyme can be regulated
CC to treat allergies including asthma, allergic rhinitis, atopic
CC dermatitis, and anaphylaxis, central nervous system disorders such as
CC brain injuries, Parkinson's disease, dementia, multiple sclerosis,
CC stroke, Alzheimer's disease, Huntington's disease, schizophrenia, Pick's
CC disease, Creutzfeldt-Jacob dementia, progressive nuclear palsy, and human
CC immunodeficiency virus (HIV) dementia, and cardiovascular diseases

```
CC   including myocardial infarction, ischaemic diseases of the heart, atrial
CC   and ventricular arrhythmia, hypertensive vascular diseases and peripheral
CC   vascular diseases. The enzyme is useful in diagnostic assays for
CC   detecting diseases and abnormalities or susceptibility to diseases or
CC   abnormalities related to the presence of mutations in the encoding
CC   nucleic acid sequences. The present sequence represents the human MAP
CC   kinase phosphatase-like enzyme DNA fragment.
XX
SQ   Sequence 1755 BP; 350 A; 577 C; 505 G; 323 T; 0 other;

  Query Match           35.1%;  Score 694;  DB 24;  Length 1755;
  Best Local Similarity  89.1%;  Pred. No. 2.2e-137;
  Matches  802;  Conservative    0;  Mismatches    0;  Indels   98;  Gaps    1;

Qy       1081 ATGGCCCGGGAGATTGACAACTTCTACCCTGAGCGCTTCACCTACCACAATGTGCGCCTC 1140
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        322 ATGGCCCGGGAGATTGACAACTTCTACCCTGAGCGCTTCACCTACCACAATGTGCGCCTC 381

Qy       1141 TGGGATGAGGAGTCGGCCCAGCTGCTGCCGCACTGGAAGGAGACGCACCGCTTCATTGAG 1200
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        382 TGGGATGAGGAGTCGGCCCAGCTGCTGCCGCACTGGAAGGAGACGCACCGCTTCATTGAG 441

Qy       1201 GCTGCAAGAGCACAGGGCACCCACGTGCTGGTCCACTGCAAGATGGGCGTCAGCCGCTCA 1260
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        442 GCTGCAAGAGCACAGGGCACCCACGTGCTGGTCCACTGCAAGATGGGCGTCAGCCGCTCA 501

Qy       1261 GCGGCCACAGTGCTGGCCTATGCCATGAAGCAGTACGAATGCAGCCTGGAGCAGGCCCTG 1320
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        502 GCGGCCACAGTGCTGGCCTATGCCATGAAGCAGTACGAATGCAGCCTGGAGCAGGCCCTG 561

Qy       1321 CGCCACGTGCAGGAGCTCCGGCCCATCGCCCGCCCCAACCCTGGCTTCCTGCGCCAGCTG 1380
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        562 CGCCACGTGCAGGAGCTCCGGCCCATCGCCCGCCCCAACCCTGGCTTCCTGCGCCAGCTG 621

Qy       1381 CAGATCTACCAGGGCATCCTGACGGCCAGCCGCCAGAGCCATGTCTGGGAGCAGAAAGTG 1440
             ||||||||||||||||||||||||
Db        622 CAGATCTACCAGGGCATCCTGACG---------------------------------- 645

Qy       1441 GGTGGGGTCTCCCCAGAGGAGCACCCAGCCCCTGAAGTCTCTACACCATTCCCACCTCTT 1500
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        646 ------------------------------------------------------------ 645

Qy       1501 CCGCCAGAACCTGAGGGTGGTGGGGAGGAGAAGGTTGTAGGCATGGAAGAGAGCCAGGCA 1560
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        646 --GCCAGAACCTGAGGGTGGTGGGGAGGAGAAGGTTGTAGGCATGGAAGAGAGCCAGGCA 703

Qy       1561 GCCCCGAAAGAAGAGCCTGGGCCACGGCCACGTATAAACCTCCGAGGGGTCATGAGGTCC 1620
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        704 GCCCCGAAAGAAGAGCCTGGGCCACGGCCACGTATAAACCTCCGAGGGGTCATGAGGTCC 763

Qy       1621 ATCAGTCTTCTGGAGCCCTCCTTGGAGCTGGAGAGCACCTCAGAGACCAGTGACATGCCA 1680
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        764 ATCAGTCTTCTGGAGCCCTCCTTGGAGCTGGAGAGCACCTCAGAGACCAGTGACATGCCA 823

Qy       1681 GAGGTCTTCTCTTCCCACGAGTCTTCACATGAAGAGCCTCTGCAGCCCTTCCCACAGCTT 1740
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        824 GAGGTCTTCTCTTCCCACGAGTCTTCACATGAAGAGCCTCTGCAGCCCTTCCCACAGCTT 883

Qy       1741 GCAAGGACCAAGGGAGGCCAGCAGGTGGACAGGGGGCCTCAGCCTGCCCTGAAGTCCCGC 1800
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        884 GCAAGGACCAAGGGAGGCCAGCAGGTGGACAGGGGGCCTCAGCCTGCCCTGAAGTCCCGC 943

Qy       1801 CAGTCAGTGGTTACCCTCCAGGGCAGTGCCGTGGTGGCCAACCGGACCCAGGCCTTCCAG 1860
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        944 CAGTCAGTGGTTACCCTCCAGGGCAGTGCCGTGGTGGCCAACCGGACCCAGGCCTTCCAG 1003

Qy       1861 GAGCAGGAGCAGGGGCAGGGGCAGGGGCAGGGAGAGCCCTGCATTTCCTCTACGCCCAGG 1920
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1004 GAGCAGGAGCAGGGGCAGGGGCAGGGGCAGGGAGAGCCCTGCATTTCCTCTACGCCCAGG 1063

Qy       1921 TTCCGGAAGGTGGTGAGACAGGCCAGCGTGCATGACAGTGGAGAGGAGGGCGAGGCCTGA 1980
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1064 TTCCGGAAGGTGGTGAGACAGGCCAGCGTGCATGACAGTGGAGAGGAGGGCGAGGCCTGA 1123
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RESULT 13
ABL40803
ID   ABL40803 standard; DNA; 599 BP.
XX
AC   ABL40803;
XX
DT   03-JUL-2002  (first entry)
XX
DE   Human MAP kinase phosphatase-like enzyme DNA fragment.
XX
KW   Mitogen activated protein; MAP; MAP kinase phosphatase-like enzyme;
KW   antiasthmatic; antidiabetic; anorectic; cytostatic; cardiant; human;
KW   antiparkinsonian; cerebroprotective; neuroprotective; nootropic; gene;
KW   neuroleptic; anticonvulsant; anti-HIV; antiarrhythmic; hypotensive;
KW   antiallergic; dermatological; vulnerary; gene therapy; ds.
XX
OS   Homo sapiens.
XX
PN   WO200220732-A2.
XX
PD   14-MAR-2002.
XX
PF   27-AUG-2001; 2001WO-EP09848.
XX
PR   07-SEP-2000; 2000US-230709P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Liou J;
XX
DR   WPI; 2002-339802/37.
XX
PT   New human mitogen activated protein kinase phosphatase-like enzyme
PT   polypeptide, regulators of which are useful for preventing, treating
PT   allergies including asthma, diabetes, obesity, cancer and
PT   cardiovascular diseases -
XX
PS   Disclosure; Fig 8; 134pp; English.
XX
CC   The invention relates to a purified human mitogen activated protein (MAP)
CC   kinase phosphatase-like enzyme polypeptide. The enzyme can be expressed
CC   by standard recombinant methodology. The MAP kinase phosphatase-like
CC   enzyme and encoding polynucleotides are useful for screening for
CC   modulators which are used for treating a MAP kinase phosphatase-like
CC   enzyme dysfunction related disease, such as asthma, a central nervous
CC   system disorder, diabetes, obesity, chronic obstructive pulmonary
CC   disease, cancer or a cardiovascular disease. The enzyme can be regulated
CC   to treat allergies including asthma, allergic rhinitis, atopic
CC   dermatitis, and anaphylaxis, central nervous system disorders such as
CC   brain injuries, Parkinson's disease, dementia, multiple sclerosis,
CC   stroke, Alzheimer's disease, Huntington's disease, schizophrenia, Pick's
CC   disease, Creutzfeldt-Jacob dementia, progressive nuclear palsy, and human
CC   immunodeficiency virus (HIV) dementia, and cardiovascular diseases
CC   including myocardial infarction, ischaemic diseases of the heart, atrial
CC   and ventricular arrhythmia, hypertensive vascular diseases and peripheral
CC   vascular diseases. The enzyme is useful in diagnostic assays for
CC   detecting diseases and abnormalities or susceptibility to diseases or
CC   abnormalities related to the presence of mutations in the encoding
CC   nucleic acid sequences. The present sequence represents the human MAP
CC   kinase phosphatase-like enzyme DNA fragment.
XX
SQ   Sequence 599 BP; 135 A; 185 C; 183 G; 96 T; 0 other;

  Query Match           24.8%;  Score 491;  DB 24;  Length 599;
  Best Local Similarity  85.9%;  Pred. No. 1.6e-94;
  Matches  599;  Conservative    0;  Mismatches    0;  Indels   98;  Gaps    1;

Qy       1024 TGGAACGCAGCAAACCTGGAGGAGCTGCAGAGGAACAGGGTCACCCACATCTTGAACATG 1083
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 TGGAACGCAGCAAACCTGGAGGAGCTGCAGAGGAACAGGGTCACCCACATCTTGAACATG 60
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